14 of the video signals and the time code information on a
15 [recording] _storage_ medium;
16   time code reader means, responsive to the
17 composite video signal from the video [tape recorder]
18 _image storing means_, for decoding the time code
19 information for each frame of the composite signal; and
20   robot controller means for controlling the path
21 of movement of the robot arm in accordance with a stored
22 control program, the robot controller means being
23 responsive to the [decoded] time code information [from
24 the time code reader] _for storing the position_
25 _coordinates of the robot arm along the path of movement_
26 _for each distinct time code associated with the video_
27 _signal on a video signal frame by frame basis and_ for
28 synchronizing the movement of the robot arm along its
29 predetermined path of movement with the time code
30 information [from the time code reader] _during the_
31 _generation of video signals and time code information_
32 _from the storage medium_ on a frame-by-frame basis.

1   2.   (Amended) The apparatus of Claim 1
2   further comprising:
3   monitor means, connected to the video [tape
4   recorder] _image storing means_, for displaying video
5   images from one of the video camera and the composite
6   image recorded on [a video tape] _the storage medium_.

1   3.   (Amended) [The] _A video time code_
2   _synchronized robot control_ apparatus [of Claim 1 wherein]
3   _comprising_:
4   _a robot including an arm movable through a path_
5   _of movement;_
6   _a video camera, mounted on the arm of the_
7   _robot, for generating video signals during movement of_
8   _the video camera;_
9   _time code generator means for generating time_
10 _code information;_

11   the video signals from the video camera [are]
12 being output to the time code generator means; [and]
13   video recorder means, responsive to the video
14 signals from the video camera and the time code
15 information from the time code generator means, for
16 recording a composite signal formed of the video signals
17 and the time code information on a recording medium;
18   the time code generator means [outputs]
19 outputting the video signals and the time code
20 information to the video [tape] recorder means[.];
21   time code reader means, responsive to the
22 composite video signal from the video recorder means, for
23 decoding the time code information for each frame of the
24 composite signal; and
25   robot controller means for controlling the path
26 of movement of the robot arm in accordance with a stored
27 control program, the robot controller means being
28 responsive to the decoded time code information from the
29 time code reader for synchronizing the movement of the
30 robot arm along its predetermined path of movement with
31 the time code information from the time code reader on a
32 frame-by-frame basis.

1   5.   (Amended)   [The] A video time code
2 synchronized robot control apparatus [of Claim 1 wherein]
3 comprising:
4   a robot including an arm movable through a path
5 of movement;
6   a video camera, mounted on the arm of the
7 robot, for generating video signals during movement of
8 the video camera;
9   time code generator means for generating time
10 code information;
11   video recorder means, responsive to the video
12 signals from the video camera and the time code
13 information from the time code generator means, for

14 recording a composite signal formed of the video signals

15 and the time code information on a recording medium;

16   the video signals from the video camera [are]

17 being output to the video [tape] recorder means; [and]

18   the time code information from the time code

19 generator means [is] being output to the video [tape]

20 recorder means[.];

21   time code reader means, responsive to the

22 composite video signal from the video recorder means, for

23 decoding the time code information for each frame of the

24 composite signal; and

25   robot controller means for controlling the path

26 of movement of the robot arm in accordance with a stored

27 control program, the robot controller means being

28 responsive to the decoded time code information from the

29 time code reader for synchronizing the movement of the

30 robot arm along its predetermined path of movement with

31 the time code information from the time code reader on a

32 frame-by-frame basis.

1   7.   (Amended) [The] A video time code

2 synchronized robot control apparatus [of Claim 1 wherein]

3 comprising:

4   [the video signals from the video camera are

5 input to a]

6   a robot including an arm movable through a path

7 of movement;

8   a video camera, mounted on the arm of the

9 robot, for generating video signals during movement of

10 the video camera;

11   combined video time code generator and reader

12 means for separately generating time code information and

13 for decoding time code information, [the time code

14 information being output to the video tape recorder.]

15   video recorder means, responsive to the video

16 signals and the time code information from the combined

17 time code generator and reader means, for recording a

18 composite signal formed of the video signals and the time
19 code information on a recording medium;
20   the time code information being output from the
21 video recorder means to the reader portion of the
22 combined time code generator and reader means; and
23   robot controller means for controlling the path
24 of movement of the robot arm in accordance with a stored
25 control program, the robot controller means being
26 responsive to the decoded time code information from the
27 combined time code generator and reader means for
28 synchronizing the movement of the robot arm along its
29 predetermined path of movement with the time code
30 information from the combined time code generator and
31 reader means on a frame-by-frame basis.

1   9.   (Amended)   [The] A video time code
2 synchronized robot control apparatus [of Claim 1 wherein]
3 comprising:
4   a robot including an arm movable through a path
5 of movement;
6   a video camera, mounted on the arm of the
7 robot, for generating video signals during movement of
8 the video camera;
9   time code generator means for generating time
10 code information;
11   video recorder means, responsive to the video
12 signals from the video camera and the time code
13 information from the time code generator means, for
14 recording a composite signal formed of the video signals
15 and the time code information on a recording medium;
16   time code reader means, responsive to the
17 composite video signal from the video recorder means, for
18 decoding the time code information for each frame of the
19 composite signal; and
20   robot controller means for controlling the path
21 of movement of the robot arm in accordance with a stored
22 control program, the robot controller means being

23 <u>responsive to the decoded time code information from the</u>
24 <u>time code reader for synchronizing the movement of the</u>
25 <u>robot arm along its predetermined path of movement with</u>
26 <u>the time code information from the time code reader on a</u>
27 <u>frame-by-frame basis</u> the robot controller means
28 [includes] <u>including:</u>
29   means for identifying the positional
30 coordinate of the robot arm corresponding in time with
31 each frame of video signals generated by the video
32 camera; and
33   the robot controller means further
34 including means for moving the robot arm to the
35 identified positional coordinates corresponding to any
36 frame of video signals as the time code information
37 identifying the any frame of video signals is input
38 thereto from the time code reader means.

1   10.   (Amended) A method of generating video
2 images comprising:
3   programming a robot to repeatedly move a video
4 camera mounted on the end of a movable arm of the robot
5 through a predetermined path of movement;
6   operating the video camera to generate video
7 signals from the camera during movement of the arm of the
8 robot <u>along the predetermined path of movement</u>;
9   generating [time code] <u>video signal frame</u>
10 <u>identification</u> information in conjunction with the
11 generation of video signals <u>on a frame-by-frame basis of</u>
12 <u>the generated video signals</u>;
13   <u>storing the position coordinates of the robot</u>
14 <u>arm along the predetermined path of movement for each</u>
15 <u>distinct one of the video signal frame identification</u>
16 <u>information on a video signal frame-by-frame basis;</u>
17   [recording] <u>storing</u> the video signals and the
18 [time code] <u>video signal frame identification</u> information
19 as a composite signal on a [recording] <u>storage</u> medium on
20 a frame-by-frame basis; <u>and</u>